

# AMENDMENT NO. 2 NOVEMBER 2020

## TO

### IS 537 : 2011 TOLUENE — SPECIFICATION

( *Second Revision* )

(Page 1, clause 2) — Substitute, ‘IS 4905 : 2015/ISO 2413 : 2009 Random sampling and randomization procedures (*first revision*)’ for ‘IS 4905 : 1968 Methods for random sampling.’

(Page 1, clause 2) — Substitute ‘IS 5165 : 2017/IS 383 : 1976 Laboratory glassware — Interchangeable conical ground joints (*first revision*)’ for ‘IS 5165:1969 Interchangeable conical ground glass joints.’

(Page 1, clause 2) – Insert the following at the end:

‘IS 1488 (Part 182) : 2020/ISO 12937 : 2000 Methods of Test for Petroleum and its Products Part 182 Petroleum Products Determination of Water Coulometric Karl Fischer Titration Method.’

(Page 1, Table 1 and Amendment no. 1) — Substitute the following for the existing:

**Table 1 Requirements for Toluene**

( *Clauses 3 and 7.1* )

Sl No.	Characteristic	Requirement	Methods of Test, Ref to Annex/IS/ASTM
(1)	(2)	(3)	(4)
i)	Toluene, percent by mass, <i>Min</i>	99.8	ATSM D7504 (Gas chromatography)
ii)	Appearance	Clear liquid free of sediment and haze when observed at 18.3 to 25.6°C	—
iii)	Colour, platinum-cobalt scale, <i>Max</i>	10	IS 8768

**Table 1 ( Concluded )**

Sl No.	Characteristic	Requirement	Methods of Test, Ref to Annex/IS/ASTM
(1)	(2)	(3)	(4)
iv)	Relative density at 15.56/15.56°C Or Density, 20°C, g/ml	0.869-0.873 0.865-0.870	A / ASTM D 4052
v)	Total Sulphur, ppm	<sup>1)</sup>	B / ASTM D 5453
vi)	Distillation range including the temperature 110.6°C at 101.3 kPa (760 mm of Hg pressure), <i>Max</i> , °C	0.6	C
vii)	Non-aromatic hydrocarbons, <i>Max</i> , percent by mass	0.1	D
viii)	Benzene content, mg/kg, <i>Max</i>	500	A / ASTM D7504
ix)	Thiophene content, mg/kg	<sup>1)</sup>	ASTM D 4735
x)	C 8 + Aromatics, ppm, <i>Max</i>	1 000	ASTM D 7504
xi)	Water content, ppm, <i>Max</i>	500	IS 1448(Part 182) (Karl Fischer method)
xii)	Hydrogen sulphide (H <sub>2</sub> S) and sulphurdioxide (SO <sub>2</sub> )	Absent	E

<sup>1)</sup> As agreed to between the purchaser and the supplier.

(Page 2, clause 4.2.3) — Substitute the following for the existing:

#### **‘4.2.3 BIS Certification Marking**

The product (s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the products may be marked with the standard mark.’